ABSTRACT OF THE DISCLOSURE

The present invention is an actuator using a piezoelectric element as a displacement element, wherein a drive signal voltage and current are reduced, and power consumption is reduced, while output is increased. A structure comprising two displacement units of laminate-type piezoelectric elements 10 and 10' and elastic elements 25 and 25' resonated by the piezoelectric elements are arranged so as to mutually intersect, and a tip 20 provided at the intersection point of the elastic members 25 and 25' describes a circular path or elliptical path, and moves a rotor 40. The oscillation of the piezoelectric elements 10 and 10' is suppressed by the elastic members 25 and 25', so as to set the phase of the electromotive force produced by the voltage effect of the piezoelectric elements 10 and 10' themselves to the opposite of the phase of the drive signal, thereby reducing current consumption. Making the spring constant of the elastic members 25 and 25' smaller than the spring constant of the piezoelectric elements 10 and 10' expands the displacement of the elastic members 25 and 25' greater than the displacement of the piezoelectric elements 10 and 10'.